

CLAIMS:

1. Scheduler for an apparatus comprising a disc storage device,
the scheduler being designed for receiving data and writing the data in storage space of a
storage medium of the disc storage device;
the scheduler being designed to operate in a first mode wherein the scheduler, when setting at
5 least one operating parameter, sets such operating parameter with a view to low noise
generation.
2. Scheduler according to claim 1, wherein the scheduler is always operating in
said first mode.
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3. Scheduler according to claim 1, the scheduler also being capable of operating
in at least a second mode in which the scheduler, when setting said operating parameter, sets
said operating parameter without noise reduction.
- 15 4. Scheduler according to claim 3, wherein the scheduler, when operating in said
second mode, sets said operating parameter to a value or selection different from the one
when operating in said first mode, while the value or selection of said operating parameter as
set in said first mode results in an amount of noise generation less than the amount of noise
associated with the value or selection of said operating parameter as set in said second mode.
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5. Scheduler according to any of claims 2-4, wherein the operative mode of the
scheduler is user-selectable, and wherein the scheduler is responsive to user input to select its
operative mode as either said first mode or said second mode.
- 25 6. Scheduler according to any of claims 2-4, wherein the scheduler is capable of
determining the presence of at least one person in the vicinity of the said apparatus, and
wherein the scheduler is designed to select its operative mode as said first mode when it
determines the presence of at least one person, and wherein the scheduler is designed to
select its operative mode as said second mode when it determines the absence of persons.

7. Scheduler according to any of claims 2-4, provided with a time-of-day clock, the scheduler being designed to select its operative mode depending on the time of day.

5 8. Scheduler according to any of the previous claims, the scheduler being designed to generate write commands for the disc storage device, wherein said at least one operating parameter is a target address of a storage location in said storage space where the data is to be written to.

10 9. Scheduler according to any of the previous claims, the scheduler being designed to generate read commands for the disc storage device, wherein said at least one operating parameter is a target address of a storage location in said storage space where the data is to be read from.

15 10. Scheduler according to any of claims 8-9, wherein the scheduler is associated with a memory containing information on a sound characterization of the disc storage device; wherein the scheduler is designed, when operating in said first mode, to consult the information in said memory when selecting a target address of a storage location in said storage space.

20 11. Scheduler according to any of claims 8-10, wherein the disc storage space comprises quiet area and noisy area; and wherein the scheduler is designed, when operating in said first mode, if there is sufficient storage space available in said quiet area as well as in said noisy area, to select target
25 addresses within said quiet area of the storage space.

12. Scheduler according to claim 11 and 3, wherein the scheduler is designed, in said second mode, to select target addresses outside said quiet area of the storage space.

30 13. Scheduler according to any of claims 8-10, wherein the disc storage space comprises mid-disc area, inner disc area and outer disc area; wherein the scheduler is designed, when operating in said first mode, if there is sufficient storage space available in said mid-disc area as well as in said inner disc area or outer disc area, to select target addresses within said mid-disc area of the storage space.

14. Scheduler according to claim 13 and 3, wherein the scheduler is designed, in said second mode, to select target addresses outside said mid-disc area of the storage space.

5 15. Scheduler according to any of claims 11-14, wherein the scheduler is designed to relocate a recording from a quiet area of the storage space to a noisy area of the storage space.

10 16. Scheduler according to claim 15, wherein the scheduler is designed to perform such relocation process in response to receiving user input indicating that the recording is intended for long-term storage.

15 17. Scheduler according to any of claims 11-16, wherein the scheduler is designed to copy a recording from a noisy area of the storage space to a quiet area of the storage space.

18. Scheduler according to claim 17, wherein the scheduler is designed to perform such copying process in response to receiving user input indicating that the recording is to be played in the near future.

20 19. Scheduler according to any of claims 15-18, wherein the scheduler is designed to perform such relocation or copying process during an idle moment.

25 20. Scheduler according to any of claims 15-18, provided with a time-of-day clock, the scheduler being designed to perform such relocation process during a predetermined time slot.

21. Scheduler according to claim 20, responsive to user input to set said time slot in future.

30 22. Scheduler according to any of claims 1-2, the scheduler being designed, when operating in said first mode, to reduce seek movements when writing/reading in/from a noisy area and to increase seek movements when writing/reading in/from a quiet area

23. Apparatus comprising a disc storage medium and a scheduler according to any of the previous claims.

24. Apparatus according to claim 23, wherein the disc storage medium comprises
5 a hard disc drive unit.